

Bacteria growth curve under cadmium stress

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Goal: To investigate the effects of increasing cadmium concentrations on different strains of E. coli

Protocol:

1. Inoculate from glycerol stock 3 E. coli strains (NEB Turbo, MG1655, W3110) in 2mL LB in culture tube, and a fourth tube of 2ml LB only
2. Grow culture overnight in 37 C shaker and 275 RPM
3. Check if the LB only tube has any growth (cloudiness?)
4. Dilute bacterial culture 1:100 into erlenmeyer flask (add 200uL overnight culture to 19.8mL of LB)
5. Set timer for 1 hr and check OD (200uL) of the culture until the OD is 0.5
6. Prepare 12 culture tubes

	0uM (3 tubes)	50uM (3 tubes)	500uM(3 tubes)	5000uM (3 tubes)
Cd stock	0	4uL	40uL	400uL
E.Coli Culture	4mL	4mL	4mL	4mL

1. Grow the culture in 37C shaker and 275 RPM
2. Measure OD of all 12 tubes every hour